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09/475,093	12/30/1999	Matthew D. Halfant	19223-000200	3180

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EXAMINER

HUYNH, CONG LAC T

ART UNIT PAPER NUMBER

2176

DATE MAILED: 12/05/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/475,093

Applicant(s)

HALFANT, MATTHEW D.

Examiner

Cong-Lac Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 September 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. This action is responsive to communications: amendment filed on 9/17/01 to the application filed on 12/30/99.
2. Claims 1-20 are pending in the case. Claims 1, 6, 13 are independent claims.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 13, the steps of the claim are not disclosed in the specification.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-20 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Lam (US Pat No. 5,960,464, 9/28/99, filed 8/23/96) in view of Callway (US Pat No. 6,075,574, 6/13/00, filed 5/22/98).

Regarding independent claim 1, Lam discloses:

- reading first digital information from a DVD player (col 4, lines 18-30)
- decompressing the first digital information to create a second digital information (col 4, lines 31-41)
- portion of memory is used when decoding video images is being performed (col 8, lines 58-63; col 4, lines 42-54)
- display the digital information (col 4, lines 31-41)

Lam does not explicitly disclose storing the second digital information, which is decompressed from the first digital information. However, since Lam shows that a portion of *memory* is used *when decoding video images* is being performed, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that storing such data into the memory of the system should be included when the data is manipulated on the display.

In addition, Lam does not disclose manipulating the second digital information, which is decompressed, in order to produce the third digital information different from the second digital information and display the third digital information.

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Callway discloses controlling contrast of DVD images to fix the image distortion so that DVD images are displayed without blooming and brightness degradation (col 1, lines 10-56; col 2, lines 13-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Callway into Lam to enhance the quality of DVD images displayed by adjusting the contrast of images read by the DVD player, which means manipulating the digital information to display to users.

Regarding claims 2 and 3, which is dependent on claim 1, Lam discloses processing a first frame in order to produce a second frame different from the first frame (col 6, lines 54-62; col 2, lines 1-12)

Regarding claim 4, which is dependent on claim 1, Lam further discloses:

- parsing the first digital information which includes an MPEG video stream (col 6, lines 1-16, 38-45)
- decoding the MPEG video stream to create the second digital information which includes a plurality of video frames (col 6, lines 38-62)

Regarding independent claim 6, Lam discloses:

- a DVD player which produces a plurality of digital frames (col 4, lines 18-41; col 2, lines 1-10)
- a buffet which stores at least one digital frame (col 1, lines 25-39; col 2, lines 52-63)

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- a video display which displays the plurality of processed frames (col 4, lines 18-30; col 2, lines 1-10)

Lam does not disclose a media processing subsystem, which manipulates the plurality of digital frames to produce a plurality of processed frames.

Callway, as mentioned in claim 1, discloses a system that manipulates digital images to produce adjusted digital images, which are processed frames as claimed (col 2, lines 13-30; col 3, lines 1-22).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Callway into Lam to enhance the quality of DVD images displayed by adjusting the contrast of images read by the DVD player.

Regarding claims 5, 7-8, 19-20, which are dependent on claims 1, 6, and 13 respectively, as in claims 1 and 6, Callway discloses enhancing contrast as well as warping images (col 1, lines 10-60; col 2, lines 13-30; col 3, lines 1-22; col 4, lines 4-23).

Regarding claims 9 and 15, which are dependent on claims 6 and 14 respectively, Lam discloses that the processed framed are displayed at a rate of at least twenty-four frames per second (col 2, lines 1-10, MPEG 2 standard decodes 720 pixels per line and 576 lines per frame for a single image and approximately *30 frames per second*).

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Regarding claims 10-12, which are dependent on claims 6 and 11 respectively, Lam discloses that:

- the DVD system comprises means for converting the processed frame into a format compatible with a video display (col 4, lines 18-40; col 1, lines 50-57, 62-67)
- the media processing subsystem comprising a plurality of media processor (col 4, lines 42-67; col 5, lines 1-44)
- media processor comprises a central processing unit and a processing buffer (col 5, lines 27-44)

Independent claim 13 is for a method of claims 1 and 6, and is rejected under the same rationale.

Regarding claim 14, which is dependent on claim 13, Lam discloses:

- reading a new frame from the compressed data stream (col 4, lines 18-41)
- a graphics or video *accelerated card for rapidly displaying* static images (col 2, lines 1-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included in Lam discarding a frame from the first plurality of frames, organizing the new frame and first plurality of frames edited to form the third plurality of frames, and obtaining the second motion information between the third plurality of frames.

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The former is merely editing the first plurality of frames by dropping one of the frames in the sequence. Since Lam provides the graphics or video accelerated card to display images, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have applied said card to the third plurality of frames for a different motion of displaying a frame from that created third frames.

Claim 16 includes the same subject matter as in claim 4, and is rejected under the same rationale.

Regarding claims 17 and 18, Lam discloses that decompressing comprises executing a software decompression algorithm o a media processing system (col 4, lines 30-67; col 5, lines 1-27) and multiple samples for a pixel using information from the first plurality of frames (col 1, lines 25-40; col 2, lines 1-17).

### ***Response to Arguments***

7. Applicant's arguments filed 9/17/01 have been fully considered but they are not persuasive.

Applicants argue that Callway does not disclose the manipulation of digital frames.

Examiner disagrees.

Though Callway does not disclose that feature, Lam, in combination with Callway, teaches the manipulation of digital frames (col 4, lines 18-41, retrieving compressed video images, *decoding the compressed video images* from the DVD CD-ROM player to



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*reconstruct the original, uncompressed video images* so that they can be displayed on a visual display device; the compressed audio sequence is also decompressed to obtain the original audio where said video and audio are included in the digital frames).

Applicants request showing of proof in relation to claims 1 and 14 regarding the teaching of the storing step.

In response to the request, Examiner shows that Lam discloses that a portion of *memory is used when decoding video images is being performed* (col 8, lines 58-63; col 4, lines 42-54). This suggests that storing video images into the memory of the system should be included when the data is manipulated on the display.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kurtze et al. (5,644,364, 7/1/97).

Maupin et al. (5,652,917, 7/29/97).

Maupin et al. (Re. 36,647, 4/4/00).

Zhang et al. (6,298,145 B1, 10/2/01).

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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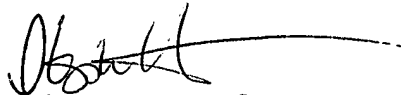
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is 703-305-0432. The examiner can normally be reached on Mon-Fri (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 707-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9000.

clh  
11/20/01

  
STEPHEN S. HONG  
PRIMARY EXAMINER